IN THE CLAIMS

Please cancel claims 1-64 without prejudice or disclaimer. Please add new claims 65-126 follows:

1 - 64. (cancelled)

65. (new) A method for isolating nucleic acids from a biological sample comprising:

combining the sample with at least one cationic surfactant, at least one protease, and a buffer, to form a reaction composition;

incubating the reaction composition at a temperature suitable for releasing nucleic acid from the biological sample; and

isolating the released nucleic acid.

66. (new) The method of claim 65, further comprising adding a second surfactant and a salt.

67. (new) The method of claim 66, wherein the second surfactant comprises a nonionic surfactant.

68. (new) The method of claim 67, wherein the nonionic surfactant is polyoxyethylene(20)sorbitan monolaurate (Tween 20), Tween 80, Triton X-100, Triton X-114, Triton X-305, Triton X-405, Brij-35, Brij-56, Brij-58, *n*-Decyl-β-D-glucopyranoside, *n*-Dodecyl-β-D-maltoside, *n*-Hexyl-β-D-glucopyranoside, *n*-Octyl-β–D-glucopyranoside, *n*-Tetradecyl-β-D-maltoside, alkyl glycosides, Glucamides, MEGA-10, MEGA-9, MEGA-8, Genapol X-80, Genapol X-10, Thesit, Lubrol PX, Genapol C-100, Pluronic F-127,

APO-10, APO-12, Big CHAP, Digitonin, or polyethyleneglycol-*p*-isooctylphenyl ether (NP-40).

69. (new) The method of claim 66, wherein the second surfactant comprises Tween 20 and the salt comprises a sodium salt.

70. (new) The method of claim 65, wherein the biological sample comprises whole tissue.

71. (new) The method of claim 65, comprising the composition of claim 3.

72. (new) The method of claim 65, comprising the composition of claim 4.

73. (new) The method of claim 65, wherein the at least one cationic surfactant comprises cetyltrimethylammonium bromide (CTAB), cetyltrimethylammonium chloride (CTACl), hexadecyltrimethylammonium bromide, or hexadecyltrimethylammonium chloride, and the at least one protease comprises Proteinase K.

74. (new) The method of claim 65, further comprising exposing the released nucleic acid to at least one organic solvent.

75. (new) The method of claim 74, wherein exposing the nucleic acid to at least one organic solvent comprises extracting the nucleic acids, precipitating the nucleic acids, or both extracting and precipitating the nucleic acids.

76. (new) The method of claim 65, further comprising adding a solid phase component capable of binding the released nucleic acid.

77. (new)The method of claim 65, further comprising adding a chaotropic salt and at least one organic solvent to precipitate the released nucleic acid.

78. (new) The method of claim 77, wherein the at least one organic solvent comprises ethanol, isopropanol, or acetone.

79. (new) The method of claim 77, wherein the chaotropic salt comprises guanidinium thiocyanate, guanidine hydrochloride, sodium thiocyanate, sodium perchlorate, or sodium iodide.

80. (new) The method of claim 65, further comprising adding a polymer.

81. (new) The method of claim 80, wherein the polymer is a polyethylene glycol.

82. (new) The method of claim 65, further comprising adding a divalent cation capable of precipitating the nucleic acid.

83. (new) The method of claim 82, wherein the divalent cation is zinc.

84. (new) The method of claim 65, wherein the nucleic acid is ribonucleic acid.

85. (new) The method of claim 84, wherein the reaction composition further comprises a ribonuclease inhibitor.

86. (new) The method of claim 85, wherein the ribonuclease inhibitor comprises aurintricarboxylic acid, vanadylate ribonucleoside complexes, phenylglyoxal, p-hydroxyphenylglyoxal, polyamines, spermidine, 9-aminoacridine, iodoacetate, bentonite, poly[2'-*O*-(2,4-dinitrophenyl)]poly(adenyhlic acid), zinc sulfate, bromopyruvic acid, formamide, copper, or zinc.

87. (new) The method of claim 86, wherein the ribonuclease inhibitor is aurintricarboxylic acid.

88. (new) The method of claim 84, wherein the reaction composition is incubated at a temperature of less than 60° C.

89. (new) The method of claim 88, wherein the reaction composition is incubated at a temperature between 40° C and 50° C.

90. (new) The method of claim 84, wherein the reaction composition has a pH of less than 8.0.

91. (new) The method of claim 90, wherein the reaction composition has a pH between 5.0 and 7.0.

92. (new) The method of claim 91, wherein the reaction composition is incubated at a temperature between 40° C and 50° C, and wherein the reaction composition further comprises aurintricarboxylic acid.

93. (new) A method for releasing nucleic acids from a biological sample comprising:

combining the sample with at least one cationic surfactant, at least one protease, and a buffer, to form a reaction composition; and

incubating the reaction composition at a temperature suitable for releasing the nucleic acids from the biological sample.

94. (new) The method of claim 93, further comprising adding a second surfactant and a salt.

95. (new) The method of claim 94, wherein the second surfactant comprises a nonionic surfactant.

96. (new) The method of claim 95, wherein the nonionic surfactant is polyoxyethylene(20)sorbitan monolaurate (Tween 20), Tween 80, Triton X-100, Triton X-114, Triton X-305, Triton X-405, Brij-35, Brij-56, Brij-58, *n*-Decyl-β-D-glucopyranoside, *n*-Dodecyl-β-D-maltoside, *n*-Hexyl-β-D-glucopyranoside, *n*-Octyl-β–D-glucopyranoside, *n*-Tetradecyl-β-D-maltoside, alkyl glycosides, Glucamides, MEGA-10, MEGA-9, MEGA-8, Genapol X-80, Genapol X-10, Thesit, Lubrol PX, Genapol C-100, Pluronic F-127, APO-10, APO-12, Big CHAP, Digitonin, or polyethyleneglycol-*p*-isooctylphenyl ether (NP-40).

97. (new) The method of claim 94, wherein the second surfactant comprises Tween 20 and the salt comprises a sodium salt.

98. (new) The method of claim 93, wherein the biological sample comprises whole tissue.

99. (new) The method of claim 93, comprising the composition of claim 3.

100. (new) The method of claim 93, comprising the composition of claim 4.

101. (new) The method of claim 93, wherein the at least one cationic surfactant comprises cetyltrimethylammonium bromide (CTAB), cetyltrimethylammonium chloride (CTACl), hexadecyltrimethylammonium bromide, or hexadecyltrimethylammonium chloride, and the at least one protease comprises Proteinase K.

102. (new) The method of claim 93, wherein the nucleic acid is ribonucleic acid.

103. (new) The method of claim 102, wherein the reaction composition further comprises a ribonuclease inhibitor.

104. (new) The method of claim 103, wherein the ribonuclease inhibitor comprises aurintricarboxylic acid, vanadylate ribonucleoside complexes, phenylglyoxal, p-hydroxyphenylglyoxal, polyamines, spermidine, 9-aminoacridine, iodoacetate, bentonite, poly[2'-*O*-(2,4-dinitrophenyl)]poly(adenyhlic acid), zinc sulfate, bromopyruvic acid, formamide, copper, or zinc.

105. (new) The method of claim 104, wherein the ribonuclease inhibitor is aurintricarboxylic acid.

106. (new) The method of claim 102, wherein the reaction composition is incubated at a temperature of less than 60° C.

107. (new) The method of claim 106, wherein the reaction composition is incubated at a temperature between 40° C and 50° C.

108. (new) The method of claim 102, wherein the reaction composition has a pH of less than 8.0.

109. (new) The method of claim 108, wherein the reaction composition has a pH between 5.0 and 7.0.

110. (new) The method of claim 109, wherein the reaction composition is incubated at a temperature between 40° C and 50° C, and wherein the reaction composition further comprises aurintricarboxylic acid.

111. (new) A kit for obtaining nucleic acid from a biological sample comprising at least one cationic surfactant and at least one protease.

112. (new) The kit of claim 111, comprising the at least one surfactant of claim 3.

113. (new) The kit of claim 112, wherein the at least one cationic surfactant comprises cetyltrimethylammonium bromide, cetyltrimethylammonium chloride, hexadecyltrimethylammonium bromide, or hexadecyltrimethylammonium chloride.

114. (new) The kit of claim 113, wherein the at least one protease is selected from the group consisting of subtilisins, subtilases and alkaline serine proteases.

115. (new) The kit of claim 114, wherein the at least one protease is Proteinase K.

116. (new) The kit of claim 111, further comprising a second surfactant and a salt.

117. (new) The kit of claim 111, further comprising at least one organic solvent for extracting the nucleic acids, precipitating the nucleic acids, or both extracting and precipitating the nucleic acids.

118. (new) The kit of claim 117, wherein the organic solvent for extracting nucleic acids comprises phenol and the organic solvent for precipitating nucleic acids comprises isopropanol or ethanol.

119. (new) The kit of claim 111, further comprising a solid phase component.

120. (new) The kit of claim 111, further comprising a chaotropic salt and an organic solvent.

121. (new) The kit of claim 111, further comprising a polymer.

122. (new) The kit of claim 111, further comprising a divalent cation capable of precipitating nucleic acid.

123. (new) The kit of claim 111, further comprising at least one ribonuclease inhibitor.

124. (new) The kit of claim 123, wherein the at least one ribonuclease inhibitor is aurintricarboxylic acid, vanadylate ribonucleoside complexes, phenylglyoxal, p-hydroxyphenylglyoxal, polyamines, spermidine, 9-aminoacridine, iodoacetate, Bentonite, poly[2'-*O*-(2,4-dinitrophenyl)]poly(adenyhlic acid), zinc sulfate, bromopyruvic acid, formamide, copper, or zinc.

125. (new) The kit of claim 111, further comprising at least one solubilizing agent.

126. (new) The kit of claim 125, wherein the solubilizing agent comprises 1-methyl 2 pyrolidinone, N-methyl pyrolidinone, pyrolidinone, dimethylformamide, or dimethylsulfoxide.